

What is claimed is:

1. An electric motor having an armature which is provided with a commutator fixed to a rotation axis and an armature coil electrically connected to said commutator and is rotatably provided within a motor housing, and having a brush which is in slidable contact with said commutator, comprising:

a brush holder fixed to said motor housing and holding said pair of brushes;

a first power feeding terminal provided with a first connecting portion electrically connected to one of said brushes and with a first leading end portion electrically connected to a power source; formed in a flat shape extending in an axial direction of said rotation axis; and provided in said brush holder; and

a second power feeding terminal provided with a second connecting portion electrically connected to another of said brushes and with a second leading end portion electrically connected to said power source; formed in a flat shape extending in the axial direction of said rotation axis; and provided in said brush holder so as to be arranged side by side in a width direction with respect to said first power feeding terminal,

wherein an electric current is supplied to said pair of brushes via said first and second power feeding terminals.

2. An electric motor as claimed in claim 1, wherein said brush holder is formed in a shape having a pair of end portions each having a circular arc outer peripheral surface and a pair of side surface portions in which outer peripheral surfaces respectively connecting said pair of end portions are flat; and said first and second power feeding terminals are provided in said one end portion.

3. An electric motor as claimed in claim 1, wherein a noise absorbing element having a first lead wire electrically connected to a base end portion of said first power feeding terminal and a second lead wire electrically connected to a base end portion of said second power feeding terminal is provided between said first and second power feeding terminals and said rotation axis so as to make said first and second lead wires in parallel to said rotation axis.

4. An electric motor as claimed in claim 2, wherein a noise absorbing element having a first lead wire electrically connected to a base end portion of said first power feeding terminal and a second lead wire electrically connected to a base end portion of said second power feeding terminal is provided between said first and second power feeding terminals and said rotation axis so as to make said first and second lead wires in parallel to said rotation axis.

5. An electric motor as claimed in claim 3, wherein any one of said first and second lead wires and said base end portions of the first and second power feeding terminals are bent vertical to the axial direction of said rotation axis.

6. An electric motor as claimed in claim 3, wherein said brush holder is provided with a wall portion for inhibiting said noise absorbing element from moving to a side of said rotation axis.

7. An electric motor as claimed in claim 5, wherein said brush holder is provided with a wall portion for inhibiting said noise absorbing element from moving to a side of said rotation axis.

8. An electric motor having an armature which is provided with a commutator fixed to a rotation axis and an armature coil electrically connected to said commutator and is rotatably provided within a motor housing, and having a brush which is held by a brush holder fixed to said motor housing and is in slidable contact with said commutator, comprising:

a power feeding terminal provided in said brush holder and electrically connected to a power source;

a conductive member provided in said brush holder and constructing a power supply circuit provided between said power feeding terminal and said brush; and

a grounding member having a conductive member side connecting portion electrically connected to said conductive member and a motor housing side connecting portion electrically connected to said motor housing, and electrically connecting said conductive member to said motor housing.

9. An electric motor as claimed in claim 8, wherein said conductive member side connecting portion is electrically connected to said conductive member via a noise preventing element.

10. An electric motor as claimed in claim 8, wherein said motor housing side connecting portion is provided so as to be freely bent with respect to a main body portion arranged on said brush holder.

11. An electric motor as claimed in claim 10, wherein said motor housing side connecting portion is fixed to a cover member closing an opening end of said motor housing by a fastening means together with said brush holder.

12. An electric motor as claimed in claim 11, wherein a conductive plate electrically connected to said motor housing is provided between said motor housing and said cover member, and a connection piece formed in said conductive plate is fixed to said cover member by said fastening means together with said motor housing side connecting portion.

13. An electric motor as claimed in claim 8, wherein said conductive member side connecting portion is provided on said brush holder so as to be freely deformed in a direction moving apart from said brush holder.

14. An electric motor having an armature which is provided with a commutator fixed to a rotation axis and with an armature coil electrically connected to said commutator, and is rotatably provided within a motor housing, comprising:

a brush holder fixed to said motor housing;

at least a pair of brushes each fixed to said brush holder by screw members arranged in parallel to said rotation axis and being in slidable contact with said commutator; and

a noise preventing element provided in a power supply circuit electrically connecting each of said brushes to a power source, and arranged so as to be lapped over any one of said screw members in an axial direction of said rotation axis.

15. An electric motor as claimed in claim 14, wherein said brush holder is formed in a shape in which a pair of end portions each having a circular arc outer peripheral surface and an outer peripheral surface each connecting a pair of said end portions have a pair of flat side surface portions, and said noise preventing element is provided in any one of said end portions.

16. An electric motor as claimed in claim 15, wherein a pair of said brushes are provided so as to be opposed to each other in a direction which is shifted at a predetermined angle with respect to a longitudinal direction of said brush holder.

17. An electric motor as claimed in claim 15, wherein one lead wire of said noise preventing element is electrically connected to said power supply circuit in one side of said end portions, and another lead wire is electrically connected to said power supply circuit in another side of said end portions.

18. An electric motor as claimed in claim 17, wherein said another lead wire reaches said another end portion along a guide wall portion provided in said side surface portion.

19. An electric motor as claimed in claim 14, wherein a receiving portion for receiving said noise preventing element is provided in said brush holder.

20. An electric motor as claimed in claim 14, wherein said noise preventing element is a choke coil arranged in such a manner that an axial direction thereof is made parallel to said rotation axis.